



September 23, 1999

New Report Reveals Solar PV Electricity Ready to Compete With Fossil Fuels

WASHINGTON, D.C., September 14, 1999 - Solar photovoltaic (PV) energy can be made cost-competitive now with conventional fossil-fuel and nuclear electricity by significantly increasing PV production, according to a report released today by business and accounting firm KPMG.

The KPMG report, "Solar Energy: From Perennial Promise to Competitive Alternative," calculates that one large-scale solar PV factory producing five million solar panels a year could reduce the cost of solar power by 75 percent or more. This cost reduction would make PV cost-competitive, for domestic consumers, with electricity produced from existing polluting sources.

Given this country's 105 million buildings, the potential market for solar PV in the U.S. is enormous. U.S. buildings currently represent around 10 percent of world energy consumption. Such a large scale factory could supply 250,000 U.S. homes with a two kilowatt system sufficient to provide half of a typical household's energy requirements.

The report, commissioned by Greenpeace, examines whether large-scale commercial production of solar PV panels could make the technology price-competitive with conventional electricity. Furthermore, it analyzes the amount of investment and the type of government action required to make this happen. The KPMG report states: "It comes down to a classic chicken and egg problem: as long as demand is small, production of solar energy will remain small scale and expensive, and as long as production is small-scale and expensive, the price will remain high and the demand small: Catch 22".

"The KPMG report demonstrates there are no major technological or financial barriers to creating a large scale solar PV industry," said Greenpeace renewable energy specialist, Dr. Iain MacGill. "However, there is a market

impasse in getting rooftop solar panels turned into standard household appliances. Government and industry must move to break this impasse".

Experts from PV-industry heavy-weights, such as Shell Solar, BP Solarex and Spire Corporation of the U.S. (one of the world's largest suppliers of equipment for manufacturing PV), were interviewed by KPMG for the report. The KPMG report points out that both industry and national governments are in a position to break the solar impasse, stating, "It is clear someone will have to bite the bullet and act."

The report estimates such a large-scale solar PV factory would cost around US\$660 million. By comparison, \$660 million represents about half of one percent of the US\$89 billion spent worldwide in 1998 on exploration and production for new oil and gas reserves. "Clearly the investment levels are miniscule for many of the big oil and energy companies that own solar manufacturing," added Dr. MacGill. "It makes one wonder if they are into solar power for the business or just for their image."

In addition, it would be a small step for the U.S. Government to initiate the transition to solar energy by using PV panels on federal buildings, not unlike it did during the development of the computer and semiconductor industry in the 70s. "Unfortunately, current government policies are still directed toward promoting the fossil fuel energy sources that are causing global warming, rather than solar and other renewable energy solutions," concluded MacGill.

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The KPMG report (PDF version available at <http://www.greenpeace.org/~climate/renewables/reports/kpmg8.pdf>) makes a case for its happening rather sooner than many people think. However, it points out, "[t]he most significant risk attached to the building of a large-scale plant for solar panels is ... the unconfirmed market for these panels."